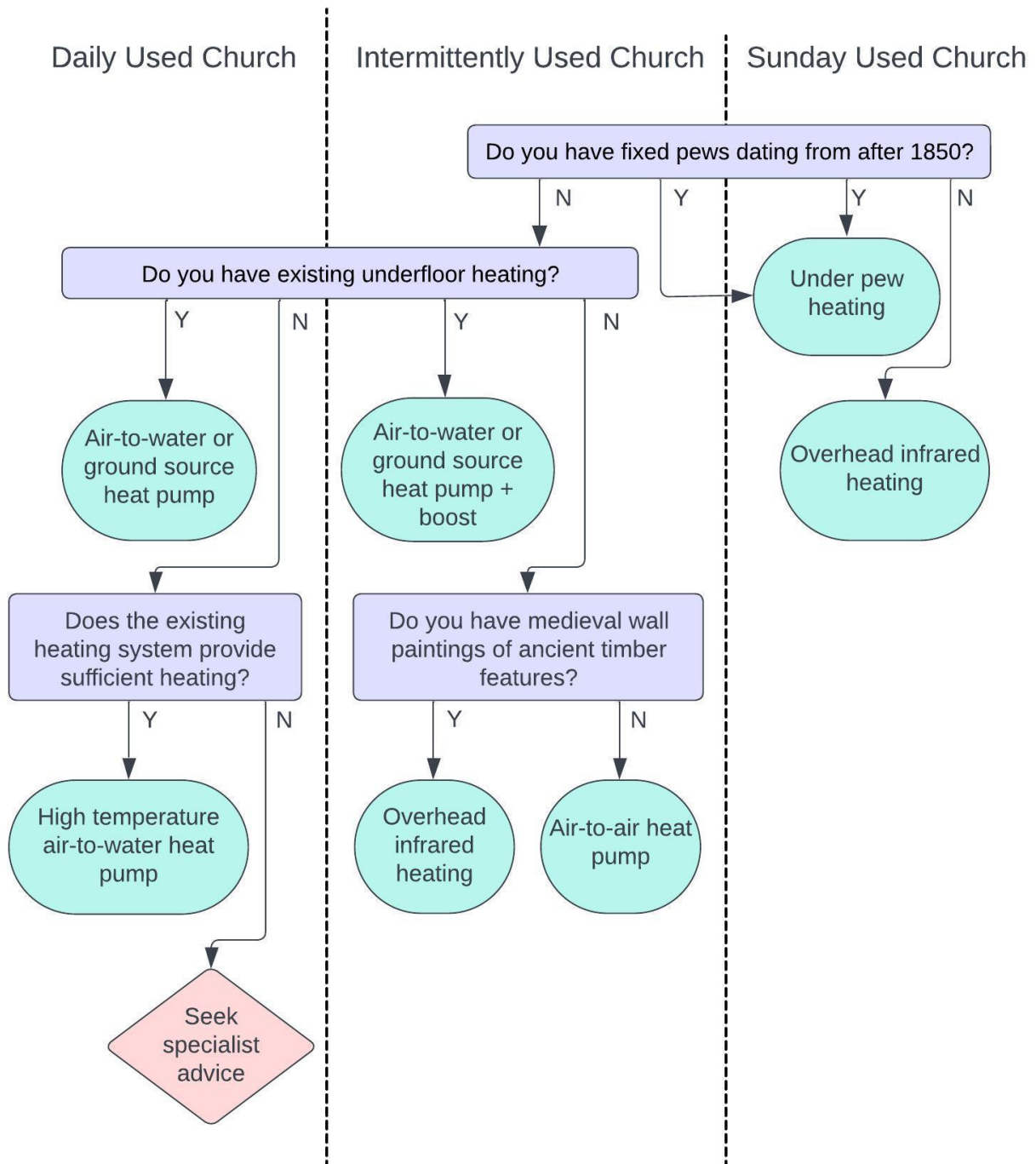


## Choosing your decarbonised church heating system



This flow chart suggests the most likely primary decarbonised heating solution for churches, based on their use patterns. All churches should be aware that there are often bespoke issues that may require specialist input, and which could affect the most appropriate outcome. This may include specific conservation needs of the building fabric or interiors, or the availability of suitable locations to accommodate internal and external elements of the heating systems.

Most solutions are likely to require more than one element to the heating system; the flow chart outlines the primary element only. Supplementary and/or 'boost' facilities are often required. For example, under pew heating solutions are likely to need supplementing with infrared panel heaters to areas such as the altar or around the font, where there are no pews. Underfloor heating systems used intermittently may require a 'boost' heating function from a secondary source, and the use of overhead infrared heaters may also require supplementary heating to make sure people remain comfortable when they are seated.

Available decarbonised heating solutions for churches are usually:

- Heat pumps: air source (air-to-air or air-to-water), ground source and, very occasionally, water source
- Under pew heaters
- Electric heaters – overhead infrared, panel heaters, chandelier heaters
- A hybrid system involving a combination of these, or in rare instances, using a fossil-fuel based back-up system.

The three usage categories for churches are defined as:

Daily Used Church	A church with activities in the main substantial areas of the building for an average of over 5 hours each day. These tend to be large, usually town centre, churches with a permanent staff team with offices in the building, and outreach and community activities occurring for 6 days of the week.
Intermittently Used Church	An active church which has activities occurring on most, but not all days of the week, usually for a couple of hours each, and often in different areas of the building. For example, weekly coffee mornings, toddler groups, evening choir practices, and a few services throughout the week, including Sundays.
Sunday Used Church	A church whose predominant function is for Sunday worship. There is typically a single service on a Sunday, maybe weekly or fortnightly, possibly a short, midweek service one morning, choir practice and/or bell ringing practice once a week, and additional usage for festival services, wedding, funerals and baptisms.

**Contact details of Diocese of Oxford Environment Team for further support and information**

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This is one of a collection of heating guidance notes available [here](#).